

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior version and listing of claims pending in this application.

1-8. (Canceled)

9. (Currently Amended) A method for the manufacture of a copper microalloy containing lead, comprising:

(a) mixing a copper alloy ~~containing~~ consisting essentially of S, Se, As, Sb, Bi, Sn, Zn, Ni, Fe, Ag, or Te impurities in amounts of the order of tens of weight ppm with lead to yield a microalloy having at least 200 weight ppm of lead, wherein the copper alloy contains Zn, Fe, Ni, Sn, and Ag impurities in amounts of the order of tens of weight ppm;

(b) continuous casting the microalloy from step (a); and

(c) heating the miroalloy from step (b) at 550-650° C for 5-600 seconds to decrease its half-softening temperature, annealing temperature, and recrystallization temperature to below 200° C.

10. (Previously Presented) The method of claim 9, wherein the microalloy has a lead content of more than 300 weight ppm.

11. (Previously Presented) The method of claim 9, wherein the microalloy has a lead content of more than 350 weight ppm.

12. (Previously Presented) The method of claim 9, wherein the hydrogen content of the microalloy is 0.5-0.7 weight ppm after casting.

13. (Canceled)

14. (Previously Presented) The method of claim 9, whereby the electrical conductivity of the microalloy is increased to values greater than 101% IACS.

15. (Previously Presented) A method for the manufacture of a copper microalloy comprising:

(a) mixing a copper alloy consisting essentially of copper and one or more of S, Se, As, Sb, Bi, Sn, Zn, Ni, Fe, Ag and Te impurities in amounts of the order of tens of weight ppm, with lead to yield a microalloy having a final concentration of at least 200 weight ppm of lead, wherein the copper alloy contains Zn, Fe, Ni, Sn, and Ag impurities in amounts of the order of tens of weight ppm; and

(b) continuous casting the microalloy.

16. (Canceled)

17. (Previously Presented) The method of claim 15, wherein the microalloy has a lead content of more than 300 weight ppm.

18. (Previously Presented) The method of claim 15, wherein the microalloy has a lead content of more than 350 weight ppm.

19. (Previously Presented) A method for the manufacture of a copper microalloy comprising:

(a) mixing a copper alloy consisting of copper and one or more of S, Se, As, Sb, Bi, Sn, Zn, Ni, Fe, Ag and Te impurities in amounts of the order of tens of weight ppm, with lead to yield a microalloy having a final concentration of at least 200 weight ppm of lead, wherein the copper alloy contains Zn, Fe, Ni, Sn, and Ag impurities in amounts of the order of tens of weight ppm; and

(b) continuous casting the microalloy.

20. (Canceled)

21. (Previously Presented) The method of claim 19, wherein the microalloy has a lead content of more than 300 weight ppm.

22. (Previously Presented) The method of claim 19, wherein the microalloy has a lead content of more than 350 weight ppm.

23. (New) A method for the manufacture of a copper microalloy comprising:

(a) mixing a copper alloy consisting essentially of copper and one or more of S, Se, As, Sb, Bi, Sn, Zn, Ni, Fe, Ag and Te impurities in amounts of the order of tens of weight ppm, with lead to yield a microalloy having a final concentration of at least 200 weight ppm of lead, wherein the copper alloy contains Zn, Fe, Ni, Sn, and Ag impurities in amounts of the order of tens of weight ppm; and

(b) continuous casting the microalloy,

wherein the copper microalloy has an electrical conductivity of greater than 101% IACS.